



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,858	06/29/2001	Boris Gelfand	2127	9028

7590 07/28/2005

Beck & Tysver, P.L.L.C.
Suite 100
2900 Thomas Avenue South
Minneapolis, MN 55416-4477

EXAMINER

NGUYEN, CINDY

ART UNIT	PAPER NUMBER
----------	--------------

2161

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,858

Applicant(s)

GELFAND, BORIS

Examiner

Cindy Nguyen

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

This is in response to amendment filed 05/09/05.

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

1. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Butler (US 6917943).

Regarding claim 1, Butler discloses: a collection of data stored on a computer system relating to multiple instances of multiple entity types, the data collection comprising:

a) a plurality of data cells stored on the computer system containing a11 of the data in the collection, with each cell being a data construct containing (Fig 2A, 2C, 2D, 2F, 2G, and corresponding text, Butler);

i) a single instance identifier value (16, fig. 2) identifying one specific instance of

a

specific entity type (18, fig. 2, Butler);

ii) a single attribute type identifier value (22, fig. 2) identifying one specific

attribute

type for the specific entity type(20,fig. 2, Butler); and

iii) an attribute value for the identified one specific attribute type (salary, fig. 2, Butler), such that each cell contains the attribute value for only the one specific attribute type and for only the one specific instance of the specific entity type and does not contain the attribute value for any other attribute type or any other instance of the specific entity type, wherein each cell is self-identifying (Fig 2A, 2C, 2D, 2F, 2G, and corresponding text, Butler).

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Butler discloses: wherein each data cell further contains a single entity identifier value identifying the specific entity type (id 16, fig. 2, Butler).

Regarding claim 3, all the limitations of this claim have been noted in the rejection of claim 2. In addition, Butler discloses: wherein all cells having the same instance identifier value and the same entity identifier value together define a cell set containing all of the data in the collection relating to the one specific instance of the one specific entity type (col. 3, lines 60-67, Butler).

Regarding claim 4, all the limitations of this claim have been noted in the rejection of claim 2. In addition, Butler discloses: wherein at least one cell has an attribute value (salary, fig. 2, Butler) that contains multiple, separate values (35000, 28000, fig. 2, Butler) relating to the specific attribute type of the specific instance of the specific entity type (100000, 120000, fig. 2, Butler).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 2. In addition, Butler discloses: wherein each cell has only four fields relating to actual data, the four fields containing the instance identifier value (ID), the entity identifier value

(name), the attribute type identifier (title), and the attribute value (salary) (see fig. 2 and corresponding text, Butler).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 5. In addition, Butler discloses: wherein no two cells contain the same values in all of the four fields (each cells in the fig. 2 contains difference values , Butler).

3. *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. *Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler (US 6917943) in view of Bruckner (6208992).*

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 1. However, Butler didn't disclose: a linking cell stored on the computer system defining an association between the first cell and the second cell, the linking cell having four fields each having values, the value of two of the fields of the linking cell being the same as the values of the first cell ; the value of the remaining two fields of the linking cell being the same as the values of the first and second fields of the second cell. On the other hand, Bruckner discloses: a linking cell stored on the computer system defining an association between the first cell and the second cell, the linking cell having four fields each having values, the value of two of the fields of the linking cell being the same as the values of the first cell ; the value of the remaining two

Art Unit: 2161

fields of the linking cell being the same as the values of the first and second fields of the second cell (col. 6, lines 20-63 and col. 13, lines 39-62, Bruckner. Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include a linking cell stored on the computer system defining an association between the first cell and the second cell, the linking cell having four fields each having values, the value of two of the fields of the linking cell being the same as the values of the first cell ; the value of the remaining two fields of the linking cell being the same as the values of the first and second fields of the second cell in the system of Butler as taught by Bruckner. The motivation being to enable the system has its capacity to enable the basic elements of the objects, relationships between objects and attributes for the description and or identification of objects and the relationship stored in their own physically or logically delimited storage areas in database tables. The storage have uniform structure exists for each link between two basic elements as a link table (col. 13, lines 18-65, Bruckner).

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Butler/Bruckner discloses: wherein the linking cell has the same format as the first and second cells (fig. 2, Bruckner).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Butler/Bruckner discloses: wherein the linking cell utilizes a flag to indicate that the linking cell contains linking information (col. 8, lines 40-51, Butler).

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Butler/Bruckner discloses: wherein the first, second, and linking cells each contain the following four fields: an entity instance filed, an entity type filed, and attribute type field and an attribute value field (object key, object identifier, object type, 240 , fig. 2 and corresponding text and col. 9, lines 19-38, Bruckner).

Regarding claim 19, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Butler/Bruckner discloses: wherein the linking cell contains the entity instance filed value and the entity type filed value of the first cell as the values of its own entity instance field and its entity type field , respectively; and further wherein the linking cell contains the entity instance filed value and the entity type field value of the second cell (col. 13, lines 39-62, Bruckner).

Regarding claim 20, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Butler/Bruckner discloses: further comprising a second linking cell also having an entity instance field, an entity type filed, and attribute type field, and an attribute value field, wherein the second linking cell contains the entity instance field value and entity type field value of the second cell as the values of it own entity instance field and it entity type field, respectively; and further wherein the second linking cell contains the entity instance field value and the entity type field value of the first cell as the values of its own attribute value field and its attribute type filed, respectively (col. 13, lines 39-62, Bruckner).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lowry et al. (U.S 4864497). Method of integrating software application programs using an attributive data model database.

Handel et al. (U.S 6195651). System, method and article of manufacture for a tuned user application experience.

Gupta et al. (U.S 6154748). Method for visually mapping data between different record formats.

Carey et al. (U.S 6421658). Efficient implementation of typed view hierarchies for ORDBMS.

Gupta et al. (U.S 6438562). Parallel index maintenance.

Heubner et al. (U.S 6101502). Object model mapping and runtime engine for employing relational database with object oriented software.

5. Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Cindy Nguyen
July 21, 2005



FRANTZ COBY
PRIMARY EXAMINER